

Solid MagiDrive Series

MD64 Series

(CF64, 4.5" OD Flange)



The MD64 MagiDrive provides high torque rotation through a high stiffness coupling. This drive would be ideally suited to robot type or platen rotation applications. The MD64 is also available in a hollow configuration. For higher torque applications (up to 40Nm) see MD64LBM & MD100H technical datasheets.

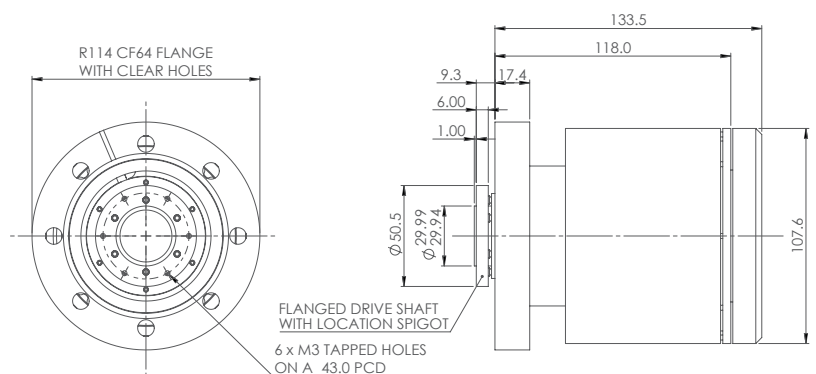
MD64 KEY ADVANTAGES

- » Magnetically-coupled fail-safe design
- » High torque 10Nm
- » No bellows or dynamic seals
- » Bakeable to 250°C
- » Zero backlash under low load
- » True UHV performance

The production-proven MagiDrive range of rotary feedthroughs enable rotation to be transferred into a vacuum system using a stiff high flux magnetic coupling. With no bellows, fluids or dynamic seals, the MagiDrive range offers reliable and totally leak-tight UHV operation.

Example Dimensions (mm)

For comprehensive 2D drawings & 3D models please contact us.



MD64 Technical Data

SPECIFICATION	VALUE
System mounting flange size	FC64 (4 1/2") with clear holes
Rear Flange option	FC38 (2 3/4") with tapped holes
Magnetic breakaway torque	10Nm
Magnetic coupling stiffness	2.9 Nm/degree
Bakeout temperature	250°C with motor/pneumatic cylinder removed
Shaft options	spigot flange
Shaft radial runout at shaft attachment	0.01mm
Maximum radial load	8300N
Maximum axial load	415N
Calibrated thimble option - resolution	1 degree
Pulley option - type and PCD	AT profile 75 teeth 5mm pitch and 119.39 PCD
Pneumatic option - cylinder sweep	adjustable 30 to 170 degrees
Pneumatic option - cylinder bore	32 mm
Pneumatic option - cylinder fitting	6mm tube push fit
Pneumatic option - cylinder switch	1A micro switch
Pneumatic option - max rotation speed	0.2 seconds per 90 degrees (dependant on load)
Stepper motor option	23 frame 8 wires 3.9A / phase
Standard stepper option - motor wiring	UTO Socket wired to WD-M-009
Upgrade stepper motor option - switches	Omron slotted opto 24V PNP type with flying leads
In-line Stepper motor max speed option 1, output torque & resolution per 1/2 step	300 rpm, 4.6Nm and 0.18 degrees
In-line Stepper motor max speed option 2, output torque & resolution per 1/2 step	150 rpm, 3.7Nm and 0.09 degrees
In-line Stepper motor max speed option 3, output torque & resolution per 1/2 step	60 rpm, 8.4Nm and 0.036 degrees
In-line Stepper motor max speed option 4, output torque & resolution per 1/2 step	30 rpm, 10Nm and 0.018 degrees
Side-mounted Stepper motor max speed option 1, output torque & resolution per 1/2 step	150 rpm, 3.5Nm and 0.096 degrees
Side-mounted Stepper motor max speed option 2, output torque & resolution per 1/2 step	75 rpm, 6.9Nm and 0.048 degrees
Side-mounted Stepper motor max speed option 3, output torque & resolution per 1/2 step	30 rpm, 10Nm and 0.0192 degrees
Side-mounted Stepper motor max speed option 4, output torque & resolution per 1/2 step	15 rpm, 10Nm and 0.0096 degrees
DC motor option	24V dc brushed geared motor
DC motor option - motor wiring	2 pin generic plug to diagram WD-010
In line and side mounted DC motor speed option 1	440 rpm, 0.9Nm and 245 rpm, 1.7Nm
In line and side mounted DC motor speed option 2	220 rpm, 1.8Nm and 98 rpm, 4.3Nm
In line and side mounted DC motor speed option 3	88 rpm, 4.2Nm and 49 rpm, 7.9Nm
In line and side mounted DC motor speed option 4	44 rpm, 8.4Nm and 25 rpm, 10Nm

For more information:

UHV Design Ltd
 Judges House, Lewes Road,
 Laughton, East Sussex, BN8 6BN, UK
 T: +44(0)1323 811188
 E:sales@uhvdesign.com
 www.uhvdesign.com

To find your nearest UHV Design
 representative please visit www.uhvdesign.com
 and click 'Contact'.